

REMARKS

Claims 1, 3-8, 14 and 15 are all the claims pending in the application.

A) 35 U.S.C. § 112, first paragraph

Claim 5 stands rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. Particularly, the Examiner asserts that the specification does not disclose a “sucked gas supply passage” as recited in lines 10 and 11 of claim 5. In response, Applicants have deleted the recitation of a “sucked gas supply passage.” Accordingly, the rejection is believed to be overcome.

B) 35 U.S.C. § 112, second paragraph

Claims 5-7, 14 and 15 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite.

Claim 5

The Examiner rejects claim 5 as being indefinite because of its recitation of a “sucked gas supply passage”. Since this recitation has been removed from claim 5, the rejection is believed to be overcome.

Claim 6

The Examiner rejects claim 6 as including a grammatical error. Applicants have amended claim 6 in a manner believed to overcome this rejection.

Claim 7

The Examiner asserts that claim 7 is indefinite because there is a structural gap. However, Applicants submit that claim 7 is definite as written and that the Examiner has failed

to sufficiently explain how there is anything indefinite about claim 7. Claim 7 recites that the “supply and stop of powder and granular material is controlled by a controller”. Thus, the claim merely recites that a controller provides control. It appears as though the Examiner is asserting that the supply cannot be controlled by a controller. However, it is unclear how the Examiner believes that the supply and stop cannot be *controlled* by a *controller*. The Examiner provides no reason why the controller cannot provide control or how this recitation makes the claim indefinite. As the Examiner notes, a non-limiting embodiment of the specification teaches that the controller 13 may control the supply and stop of powder material through a driving motor 11. Yet this clearly is a teaching of the controller controlling the supply and stop as claimed. Not reciting the driving motor in the claim does nothing to make the claim indefinite. If the Examiner insists on maintaining this rejection, Applicants request that the Examiner provide some legal basis supporting his assertion that there is a structural gap which makes the claim indefinite.

Claim 14

The Examiner rejects claim 14 for the recitation of “a switching valve.” Applicants have amended the claim in a manner believed to overcome this rejection.

Claim 15

Although the Examiner initially lists claim 15 as rejected, there is no discussion of reasons for rejection of claim 15. Since there is no specific rejection of claim 15, it appears as though it is allowable. Applicants have rewritten claim 15 in independent form and thank the Examiner for allowing this claim.

Claim Rejections 35 U.S.C. § 102

Claims 1, 3-7 and 14 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Woodward (U.S. Patent No. 5,312,040). Applicants respectfully traverse.

In Applicants' Amendment filed March 10, 2006, Applicants explained that Woodward discloses that when water is dumped through nozzle dump 120, the pressure drops below 1,000 PSI and gas flows out of the nozzle 118. That is, the diversion of the water is what causes the air to flow through the nozzle 118. Since the pressure drop caused by the fluid flowing through the nozzle dump 120 causes the air to flow through the nozzle 118, the fluid and the air do not mix.

In response, the Examiner asserts that "[e]ven if Woodward does not contemplate a flow pressure of less than 1,000 psi without actuating trigger 102, based on the operating parameters disclose[d] by Woodward, such a possibility does exist." However, it is unclear why the Examiner believes there is such a possibility. Woodward discloses a device which is structured so that it operates as detailed in the March 10 Amendment and reiterated above (*i.e.*, a device in which the gas only flows through the nozzle 118 in response to the fluid being diverted from the nozzle 118 to the nozzle dump 120). Other possibilities appear to be outside of the disclosure of Woodward.

Furthermore, even if there were a possibility, the mere "possibility" of the Woodward device meeting the claimed device is insufficient. The Examiner must show that there is a certainty that the device actually would meet the recited elements of the claimed invention (*i.e.*, the Examiner must show that Woodward actually does disclose the invention).

In the Response to Arguments section on page 5 of the Office Action, the Examiner provides two additional rationales for maintaining the rejection based on Woodward. Particularly, the Examiner asserts that Woodward anticipates claim 1 because mixing with the injection nozzle has not been positively recited and claim 1 merely hints mixing pressurized liquid and gas with the injection nozzle. The Examiner also asserts the spray 33 would mix with spray 60 outside of the Woodward spray gun.

These assertions appear to be an attempt to ignore the specific recitations of claim 1 and Woodward's failure to meet the claimed recitations. Even though claim 1 already positively recited mixing with the injection nozzle (claim 1 did recite "an injection nozzle **for mixing** and then injecting **a pressurized liquid and a pressurized gas...**"), claim 1 has been amended to even further clarify that the injection nozzle mixes a pressurized liquid and a pressurized gas. Claim 1 now recites "an injection nozzle which mixes a pressurized liquid and a pressurized gas in said injection nozzle..." Thus, that the injection nozzle mixes the pressurized liquid and pressurized gas is extremely clear. The Examiner cannot simply ignore this recitation and the structure of an injection nozzle required by the recitation. Woodward clearly lacks such a nozzle.

In contrast to the claimed invention, as detailed in the March 10 Amendment and again above, Woodward is specifically designed so that **either** a liquid or a pressurized gas flows through the nozzle 118. When the liquid flows through the nozzle 118, pressurized gas does not flow through the nozzle (*see* Fig. 3). As shown in Fig. 4, when the liquid is diverted to the nozzle dump 120, and thus gas flows through the nozzle 118, they still are not mixed. Instead,

the stream of the liquid 33 is diverted in a direction away from the gas spray 60. Even if there were any incidental mixing at some point outside the nozzle, since the nozzle 118 directs the gas spray 60 in a direction different than the liquid 33, it still could not be considered a **“an injection nozzle which mixes a pressurized liquid and a pressurized gas in said injection nozzle”** as claimed. Any incidental mixing outside the nozzle would not be “in the injection nozzle” as claimed. Therefore, Woodward nozzle 118 clearly cannot be considered a nozzle as set forth in claim 1.

Claims 3 and 4 depend from claim 1 and are therefore allowable at least by virtue of their dependency.

Claim 5 is allowable over Woodward at least because the Examiner's combinations fails to teach a controller which controls a powder and granular supply means as recited in claim 5. In a non-limiting embodiment of the specification of the present application, the powder and granular supply means 11 consist of a driving motor and a screw type feeding device 7. The controller stops and starts operation of the driving motor 11. The Examiner asserts that Woodward gravity feed hopper 16 constitutes a powder and granular supply means as claimed. However, as explained in the March 10 Amendment, the Examiner's alleged supply means (gravity feed hopper 16) cannot constitute the claimed supply means because it is not controlled by the alleged controller 26, 28. Applicants note that although similar arguments were previously presented in the March 10 Amendment, the Examiner did not address this argument in the present Office Action.

Claim 6 sets forth that pressurized gas is supplied to the injection nozzle when the sensor detects the supply of pressurized liquid from the liquid tank to the injection nozzle. Therefore, the nozzle of claim 6 is supplied with both pressurized gas and pressurized liquid. In contrast, as discussed above with respect to claim 1, Woodward is specifically designed so that **either** a liquid or a pressurized gas flows through the nozzle 118. Therefore, Applicants respectfully submit that claim 6 is allowable over Woodward. Claims 7 and 14 depend from claim 6 and are therefore allowable at least because of their dependency.

Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

AMENDMENT UNDER 37 C.F.R. §1.116
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The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

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